

Claims

1. A light device, comprising:
a flash lamp for generating high intensity ultraviolet light adapted for placement inside a body.
2. The device of claim 1 wherein the flash lamp is a xenon flash lamp.
3. The device of claim 1 further comprising a substantially transparent housing.
4. The device of claim 3 wherein the housing includes a lenticular pattern on a surface of the housing to focus or diffuse light generated by the flash lamp.
5. The device of claim 4 wherein the lenticular pattern is a fresnel pattern.
6. The device of claim 1 further comprising an transformer in electrical communication with the flash lamp.
7. The device of claim 1 further comprising an interventional device, wherein the flash lamp is disposed near a distal end of the interventional device.
8. The device of claim 7 wherein the interventional device is a balloon catheter and the flash lamp is disposed inside a balloon portion of the catheter.
9. The device of claim 8 wherein the balloon catheter has a lumen for transporting a fluid to the balloon portion.
10. The device of claim 9 wherein the balloon catheter has an aperture at distal end of the catheter for removing the fluid.

11. The device of claim 7 wherein the interventional device has a sliding stop disposed at a proximal end of the intervention device for controlling depth of insertion of the interventional device.

12. The device of claim 7 wherein the interventional device has a filter disposed near the distal end of the interventional device for attenuating non-ultraviolet light generated by the flash lamp.

13. The device of claim 7 further comprising a control unit in communication with the flash lamp.

14. A method for illuminating tissue, comprising:

- a) providing a light device comprising a flash lamp;
- b) inserting the light device inside a body near tissue to be illuminated;
- c) energizing the light device to generate high intensity ultraviolet light; and
- d) illuminating the tissue by applying the generated light to the tissue.

15. The method of claim 14 wherein illuminating the tissue comprises ablating a mucosal lining of an esophagus.

16. The method of claim 14 wherein illuminating the tissue comprises ablating a mucosal lining of a throat.

17. The method of claim 14 wherein illuminating the tissue comprises ablating a mucosal lining of an intestine.

18. The method of claim 14 wherein illuminating the tissue comprises ablating a mucosal lining of a colon.

19. The method of claim 14 wherein illuminating the tissue comprises ablating an endothelial lining of a uterus.

20. The method of claim 14 wherein illuminating the tissue comprises ablating an endothelial lining of a urethra.

21. The method of claim 14 wherein illuminating the tissue comprises ablating an endothelial lining of a bladder.

22. The method of claim 14 wherein illuminating the tissue comprises ablating an endothelial lining of an organ.

23. The method of claim 14 wherein illuminating the tissue comprises ablating an endothelial lining of a duct.

24. The method of claim 14 wherein illuminating the tissue comprises ablating an endothelial lining of a vessel.

25. The method of claim 14 further comprising disposing the light device at a distal end of an interventional device and inserting the interventional device inside a body near tissue to be illuminated.

26. The method of claim 25 further comprising transporting a fluid to the light device to dissipate heat generated by the light device.

27. The method of claim 14 further comprising characterizing the tissue by transporting a dye to the tissue to stain the tissue and wherein illuminating the tissue comprises ablating the tissue using light absorbed by the stained tissue.

28. The method of claim 14 further comprising introducing a drug near the tissue and activating the drug through illumination.